IN THE CLAIMS:

Please cancel claims 1-5 and 7-20 without prejudice.

1-20.   (Cancelled)

21.   (Original)   A method for building queries, comprising:

providing a logical model to logically describe the physical fields, the logical model comprising logical fields corresponding to respective physical fields;

providing a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model;

receiving user input specifying a selection and a location, in the graphical user interface, of a first logical result field;

receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query; and

transforming the abstract query into an executable query containing at least one combinatorial statement containing representations of the first and second logical result fields, and being generated as a result of the relative geometric relationship.

22.   (Original)   The method of claim 21, wherein the combinatorial statement is a UNION.

23.   (Original)   The method of claim 21, further comprising displaying each of the logical fields of the logical model as selectable logical result fields in the graphical user interface.

24.   (Original)   A computer readable medium containing a graphical user interface program which, when executed, performs an operation for building abstract queries

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defined with respect to a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of the data, the operation comprising:

receiving user input specifying a selection and a location, in the graphical user interface, of a first logical result field; wherein the graphical user interface allows user selection of logical result fields from the logical model and supports combinatorial relations between user selected logical result fields; and

receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields define at least a portion of an abstract query, which is transformed into an executable query containing at least one combinatorial statement containing counterparts of the first and second logical result fields.

25.   (Original)   The method of claim 24, wherein the combinatorial statement is a UNION.

26.   (Original)   A computer readable medium containing a program which, when executed, performs an operation for building abstract queries defined with respect to a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of the data, the operation comprising:

receiving user input specifying a selection and a location, in a graphical user interface, of a first logical result field; wherein the graphical user interface allows user selection and arrangement of logical result fields selected from the logical model;

receiving user input specifying a selection and a location, in the graphical user interface, of a second logical result field, wherein the first and second logical result fields have a relative geometric relationship and define at least a portion of an abstract query; and

transforming the abstract query into an executable query containing at least one combinatorial statement containing counterparts of the first and second logical result fields, and being generated as a result of the relative geometric relationship.

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27. (Original)   The computer readable medium of claim 26, wherein the combinatorial statement is a UNION.

28. (Original)   The computer readable medium of claim 26, wherein the relative geometric relationship is vertical.

29. (Previously Presented)   A computer system, comprising memory and at least one processor, and further comprising:

a logical model comprising a plurality of logical field definitions mapping to physical fields of physical entities of data, whereby the logical model provides a logical view of the data, each of the definitions comprising a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name and a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition;

a query specification defining an interface to the plurality of logical field definitions thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions; and

a graphical user interface allowing user selection and arrangement of logical result fields selected from the logical model; wherein the graphical user interface comprises input cells for user-selected logical result fields and wherein a predefined geometric relationship between cells specifies whether user-selected logical result fields in the cells are related by a first combinatorial statement type or a second combinatorial statement type.

30. (Original)   The system of claim 29, wherein the first combinatorial statement type is a UNION and the second combinatorial statement type is a JOIN.

31. (Original)   The system of claim 29, wherein the predefined geometric relationship is vertical.

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32.   (Previously Presented)   The system of claim 29, wherein user-selected logical result fields in horizontally adjacent cells are JOINed.

33.   (Original)   The system of claim 29, further comprising a relational database containing the physical entities of data.

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